AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1. (currently amended) A method comprising:

encoding a digital signal in a manner that reduces variations over time in a collective signal level of the digital signal;

communicating the digital signal over a plurality of segments, the plurality of segments including a first, a second, and a third segment, and the plurality of segments defining ~~of~~ at least four signal lines; and

~~transposing~~ arranging the signal lines ~~between~~ within the plurality of segments such that an order of the signal lines in the first segment is different than an order of the signal lines in the second segment, and an order of the signal lines in the third segment is different than the order of the signal lines in both the first and the second segments.~~of signal lines in a manner that reduces differences in interline couplings between a given signal line and each of the remaining ones of the at least four signal lines.~~

2. (currently amended) A method as recited in claim ~~1~~44, wherein the interline coupling of a particular pair of signal lines is represented as a function of the distances between said particular pair of signal lines over all the segments.

3. (currently amended) A method as recited in claim ~~1~~44, wherein the interline coupling of a particular pair of signal lines is represented as a function of a summation of the distances between said particular pair of signal lines over all the segments.

4. (original) A method as recited in claim 1, wherein the segments have

approximately equal lengths.

5. (currently amended) A method as recited in claim ~~1~~44, wherein:

the segments have approximately equal lengths; and

the interline coupling of a particular pair of signal lines is represented as a function of a summation of the distances between said particular pair of signal lines over all the segments.

6. (original) A method as recited in claim 1, wherein at least two of the segments have different lengths.

7. (currently amended) A method as recited in claim ~~1~~44, wherein at least two of the segments have different lengths, the different lengths being such that they reduce differences between the interline couplings of different pairs of the signal lines.

8 (currently amended) An interconnection for communication of a digital signal, comprising:

at least four signal lines that traverse a plurality of segments, the plurality of segments including a first, a second, and a third segment, the signal lines being configured to carry individual signals that are encoded to reduce variations over time in a collective signal level of the individual signals; and

~~wherein there is an interline coupling parameter associated with any particular pair of signal lines that is a function of the distances between said particular pair of signal lines over all the segments; and~~

wherein an order of the signal lines in the first segment is different than an order of the signal lines in the second segment, and an order of the signal lines in the third segment is different than the order of the signal lines in both the first and the second segments. ~~at least some of the signal lines are transposed between the segments in a manner that reduces differences between the interline coupling parameters associated with pairs of signal lines formed between a given signal line and each of the remaining ones of the at least four signal lines.~~

9. (previously presented) An interconnection as recited in claim 8, wherein the plurality of segments comprises three segments.

10. (original) An interconnection as recited in claim 8, further comprising a planar substrate upon which the signal lines are fabricated.

11. (original) An interconnection as recited in claim 8, further comprising an encoder that encodes the signals in a manner that reduces variations over time in the collective signal level of the individual signals.

12. (currently amended) An interconnection as recited in claim 845, wherein the interline coupling parameter associated with any particular pair of signal lines is also a function of the lengths of the segments.

13. (currently amended) An interconnection as recited in claim 845, wherein the interline coupling parameter associated with any particular pair of signal lines is a function of a summation of the distances between said particular pair of signal lines over all the segments.

14. (original) An interconnection as recited in claim 8, wherein the segments have approximately equal lengths.

15. (currently amended) An interconnection as recited in claim ~~8~~45, wherein:

the segments have approximately equal lengths, and

the interline coupling parameter associated with any particular pair of signal lines is a function of a summation of the distances between said particular pair of signal lines over all the segments.

16. (original) An interconnection as recited in claim 8, wherein at least two of the segments have different lengths.

17. (currently amended) An interconnection as recited in claim ~~8~~45, wherein at least two of the segments have different lengths, the different lengths being such that they reduce differences between the interline coupling parameters of different pairs of the signal lines.

18. (currently amended) An interconnection as recited in claim ~~8~~45, wherein the differences between the interline coupling parameters are reduced to a ratio of no greater than 2 to 1.

19. (currently amended) An interconnection as recited in claim ~~8~~45, wherein the differences between the interline coupling parameters are reduced to a ratio of no greater than 1.5 to 1.

20-31. (cancel)

32. (currently amended) An interconnection for communication of a digital signal, comprising:

three or more signal lines forming at least three possible pairs of signal lines, a respective interline coupling parameter being associated with a respective pair of signal lines, each pair of at least two different pairs of signal lines among the possible pairs of signal lines being ~~transposed~~ repositioned in the interconnection to reduce differences in interline coupling parameters associated with the at least three possible pairs of signal lines.

33. (previously presented) An interconnection as recited in claim 32 having a plurality of segments, wherein the three or more signal lines traverse the plurality of segments, and wherein the interline coupling parameter associated with a respective pair of signal lines m and n is a function of a sum of interline coupling terms $C(m, n, s)$ over all segments, where $C(m, n, s)$ is an interline coupling term between the pair of signal lines m and n in segments s.

34. (previously presented) An interconnection as recited in claim 33, wherein the coupling term $C(m, n, s)$ is a function of the distance between signal lines m and n insegment s.

35. (previously presented) An interconnection as recited in claim 32 having a plurality of segments, wherein the three or more signal lines traverse the plurality of

segments and are in different orders in different segments..

36. (previously presented) An interconnection as recited in claim 33, wherein the coupling term C(*m, n, s*) is a function of the distance between signal lines *m* and *n* in segment *s* multiplied by the length of segment *s*.

37. (previously presented) An interconnection as recited in claim 33, wherein the coupling term C(m, n, s) is a function the length of segment *s*.

38. (previously presented) An interconnection as recited in claim 32, the three or more signal lines collectively having at least three segments.

39. (original) An interconnection as recited in claim 32, further comprising a planar substrate upon which the signal lines are fabricated.

40. (currently amended) An interconnection as recited in claim 32, wherein each possible pair of signal lines is ~~transposed~~ repositioned at most once.

41. (currently amended) An interconnection as recited in claim 32, whereinthe three or more signal lines including first, second and third signal lines and the at least three possible pairs of signal lines including a first signal line pair formed with the first and second signal lines and a second signal line pair formed with the first and third signal lines, and wherein the at least two different pairs of signal lines are ~~transposed~~ repositioned in the interconnection to equalize as nearly as possible the interline coupling parameter associated with the first signal line pair and the interline

coupling parameter associated with the second signal line pair.

42. (previously presented) An interconnection as recited in claim 32, wherein the differences between the interline coupling parameters associated with any two possible pairs of signal lines are reduced to a ratio of no greater than 2 to 1.

43. (previously presented) An interconnection as recited in claim 32, wherein the differences between the interline coupling parameters associated with any two possible pairs of signal lines are reduced to a ratio of no greater than 1.5 to 1.

44. (new) The method of claim 1, wherein the arrangement is based, at least in part, on differences in interline couplings between a givensignal line and each of the remaining ones of the at least four signal lines.

45. (new) The interconnection of claim 8, wherein the orders are based on differences in interline couplings between a given signal line and each of the remaining ones of the at least four signal lines.